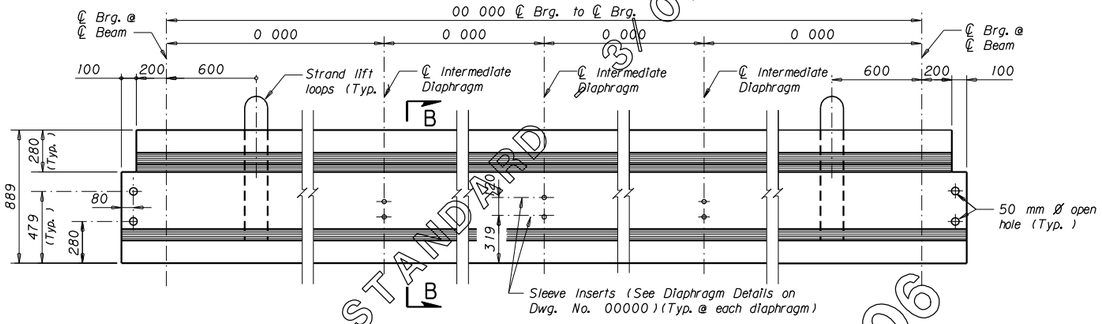
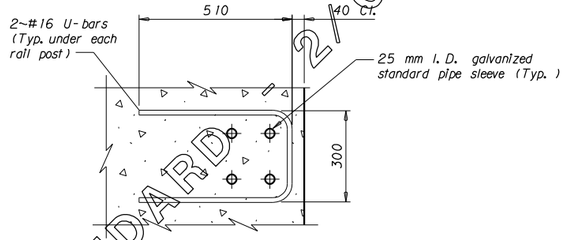
STATE	PROJECT NUMBER	SHEET NO.
MONTANA		



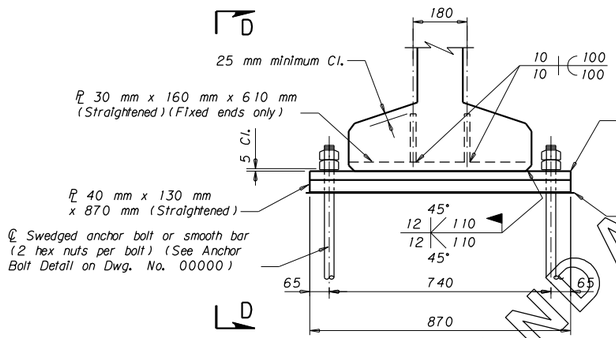
ELEVATION



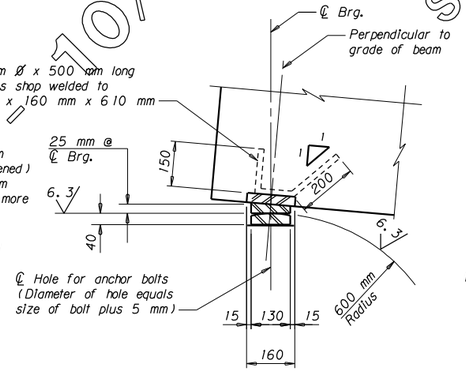
ANCHOR BOLT ASSEMBLY REINFORCEMENT

Scale ~ 1 : 10

(By Prestressed Beam Manufacturer)

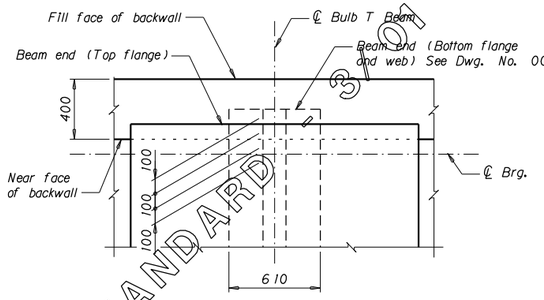


END VIEW



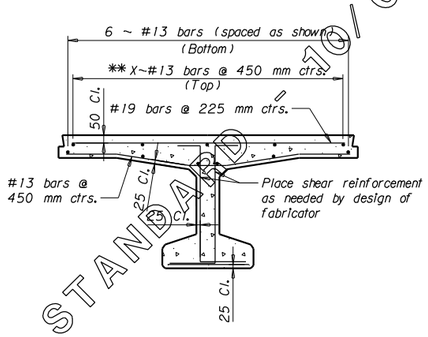
FIXED SHOE DETAILS

VIEW D-D



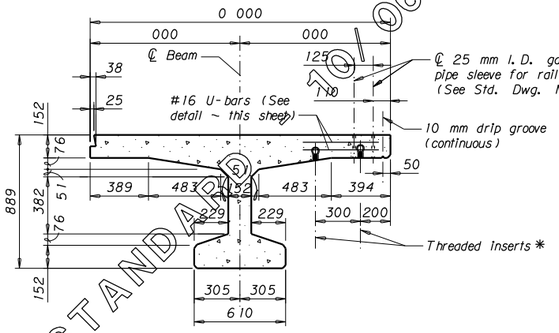
BEAM END DETAIL

**NOTE: Extend top longitudinal bars 510 mm beyond end of beam. See Detail A on Dwg. No. 00000.

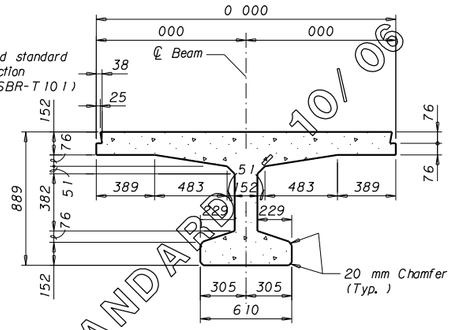


REINFORCING PLACEMENT DETAIL

* NOTE: Provide 16 mm Ø threaded inserts, match rail post spacing (Typ. both sides) Offset insert longitudinally to avoid embedded rail post plate and reinforcing. Minimum safe tension working load for inserts is 8.9 kN. Include the cost of the inserts in the unit price bid for Prestressed Beam ~ Bulb Tee.



SECTION B-B EXTERIOR BEAM



SECTION B-B INTERIOR BEAM

NOTES:

SPECIFICATIONS: See General Layout Dwg. No. 00000 for design specifications. Design and fabricate the beam to support the dead load and live load stresses and provide a minimum ultimate moment capacity shown on this sheet. Show stresses in the beam under each loading condition that is anticipated in the manufacture, handling and service life of the beam.

PRESTRESSING STEEL: Use 12.7 mm diameter, 7 wire strand prestressing steel.

HARDWARE: Obtain approval of the engineer for all embedded plates, threaded inserts, hold down devices, lifting devices and any other hardware incorporated in the beam prior to fabrication.

BEAM LENGTH: Increase the overall length of the beam 0.60 mm per meter of length to allow for elastic shortening, shrinkage and creep.

VARIATIONS: Variations in the general shape or in the deck width or span lengths from those shown on the Bridge drawings are not allowed without the approval of the Engineer. Obtain approval from the engineer of any variation requiring the alteration of backwall, diaphragm and sleeve spaces as shown on the Bridge drawings.

PRESTRESSED CONCRETE BULB TEE BEAMS: Fabricate the prestressed concrete bulb tee beams in accordance with the details shown on this drawing, Dwg. No. 00000 and MSBR-T101. Maximum f'c (Compressive strength of concrete in 28 days) for design is 48 MPa. Design stresses without prestress are as shown in the table below. All values shown in the table below are based on the beam sections shown on this sheet. Alternate beam section will be allowed provided they meet the requirements of these plans and the Special Provisions.

THIS SPACE FOR APPROPRIATE BEAM DESIGN TABLE - SEE MREF.REF - EPNOTES

ERECTION: Hold all galvanized pipe sleeves in accurate position while placing concrete for the beam.

FABRICATOR NOTE: Include an allowance for 60 mm of asphalt surfacing in lieu of the usual 48.8 kilograms per square meter. Apply rail loads to the exterior beam only. Broom finish the top surface of beam in accordance with Subsection 552.03.12(C) of the Standard Specifications.

NOTE: Include all costs to furnish and install anchor bolts, nuts, shoes, fiber-reinforced pads and embedded plates in the unit price bid for Prestressed Beam ~ Bulb Tee.

NOTE: See substructure details for length and size of anchor bolts.

NOTE: Use structural steel meeting the requirements of AASHTO M 270M Grade 250 for embedded plates and shoes. Use structural steel meeting the requirements of AASHTO M 314M Grade 248 for anchor bolts.

NOTE: Paint shoes according to Standard Specifications.

MONTANA DEPARTMENT OF TRANSPORTATION

BULB TEE SEED FILE

BEAM DETAILS

DESIGNED		
DRAWN		
CHECKED		
REVISED		
REVISED		
REVISED		

FILENAME: XXXXBRBMBSTD.DGN DRAWING NO.

BRIDGE BUREAU

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